

# DELWORKS

E-Series

# DIGITAL RADIOGRAPHY

# MEDICAL



Complete Medical DR  
Upgrade Packages



Digitize Your Radiography System and  
Realize the DELWORKS Advantage . . .

**DEL MEDICAL**  
A UMG COMPANY

# DEL MEDICAL DELWORKS

## *E-Series Detectors*

- Capture sharper images with more detail and lower patient dose
- Minimize the need for repeat exposures with exam specific image processing algorithms
- Optimize your workflow with detector integration flexibility designed to accommodate varying technologist work routines
- Improve workflow efficiency with full generator integration which gives the technologists the flexibility to view images and adjust their techniques from multiple locations

DELWORKS E-Series, state-of-the-art DR solutions, include portable wireless and fixed detector options with Cesium Iodide (CsI) scintillators. E-Series detectors are configurable for single, dual, or multi-detector applications.

### **E14C Wireless, Portable Detector**

The E14C is an ultra-light, portable 14in x 17in wireless detector with outstanding image quality, offering the versatility needed to optimize workflow. The E14C has an internal accelerometer which automatically senses motion and takes the detector in and out of ready mode, extending its battery life. The Easy Connect feature senses exposure without the need for generator synchronization (prep signal).

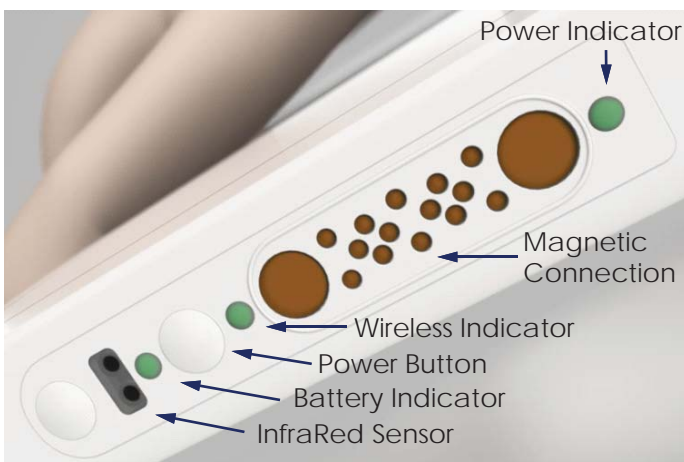
### **E24C Wireless, Portable Detector**

The E24C is a compact 24cm x 30cm version of the E14C detector that is ideal for small anatomy and pediatric imaging.

### **E17C Fixed Detector**

The E17C fixed, 17in x 17in, large format flat-panel detector is designed to minimize technologist interaction with upright exams in a dual or multi-detector configuration. It is easy to integrate in all types of X-ray systems and delivers both quality images and fast exams, for increased productivity.

Wireless & fixed detectors  
can easily be mixed!



## E-Series Acquisition & Processing Workstation

- Automatic data input from RIS/HIS via DICOM Modality Worklist query\*
  - Manual input of patient data via keyboard or touchscreen
  - Automatic selection of exam procedure based on Worklist\*
  - Automatic patient query to the worklist via bar code reader (option)\*
  - Programmable x-ray technique factors for each exam, including APR program and AEC settings with manual override capability (with compatible generators)
  - Pre-exposure display of patient and procedure information, X-ray generator exposure factors, status and control functions integrated in a single display screen
  - Post-exposure display of actual exposure parameters and acquired thumbnail images
  - Dose per area product reading is displayed on the workstation monitor and is automatically burned in the DICOM header (if the generator is connected to a DAP camera)
  - Optional image stitching
- \* *subject to availability and compatibility of exam data on the RIS/HIS network*



*Superior Image Quality*

### Image processing features

- Exam-specific image processing algorithms automatically optimize the images based on selected patient anatomy
- Optimized image processing parameters. APR specific default values with manual adjustment if desired.
- Image rotation in 90° steps, horizontal mirroring, automatic image cropping to collimated area, and manual image cropping
- Verifying the assigned image laterality and patient orientation, and correcting them if necessary
- Adding orientation markers and text comments directly on the image (pre-defined or free text)
- Histogram of pixel density
- Selection of optimized LUT (Look-Up Table) according to exam type
- Manual adjustment the LUT, window and level
- User selection of two different image processing methods:  
The first applies a specific algorithm to enhance the anatomic structures for film-like appearance. The second, enhances in the same image, the appearance of low-contrast structures such as tissue and vessels, while maintaining and enhancing the visibility of high-contrast structures such as bones.
- Rejected images management



*Generator Exposure Control and Positioning Guide*

### Connectivity

- System can be connected to DICOM compatible devices through Ethernet port
- Capable of sending images to multiple destinations at the same time
- The workstation is equipped with a cd burner to export acquired images in DICOM format or in other formats (jpg, bmp, tiff)

### Supported DICOM classes

- Modality Worklist (SCU) for RIS/HIS integration
- Storage (SCU) for image transfer to workstations and archives
- Print (SCU) for laser imagers
- MPPS (SCU) to update the worklist provider on the exam progress



*Image Stitching (optional)*

# DEL MEDICAL DELWORKS

## E-Series Detector Options



E14C Wireless  
14in x 17in (35cm x 43cm)



E17C Fixed  
17in x 17in (43cm x 43cm)



E24C Wireless  
(24cm x 30cm)

Specifications	E14Cw	E17C	E24Cw
Detector Size	15in x 18in x 0.6in	19.7in x 19.3in x 1.8in	27cm x 33cm
Active Area	13.8in x 16.8in	16.9in x 16.9in	24cm x 30cm
Type	Wireless	Fixed	Wireless
Scintillator	Cesium Iodide	Cesium Iodide	Cesium Iodide
Pixel Pitch	148µm	148µm	148µm
Spatial Resolution	3.5 lp/mm	3.5 lp/mm	3.5 lp/mm
Pixels	2,400 x 2,880	2,800 x 2,880	1,646 x 2,057
Bit Depth	16 bit (A/D)	16 bit (A/D)	16 bit (A/D)
Image Preview	3 second	4 seconds	1 second
Image Display (QC)	9 seconds	6 seconds	6 seconds
MTF	61% @ 1.0 lp/mm	64% @ 1.0 lp/mm	61% @ 1.0 lp/mm
DQE	66% @ 0.05	65% @ 0.05 lp/mm	66% @ 0.05
Weight	6.17lb (2.8kg)	27.5lb (12.5kg)	3.5lb (1.6kg)
Battery Life	up to 8 hrs	NA	up to 10 hrs

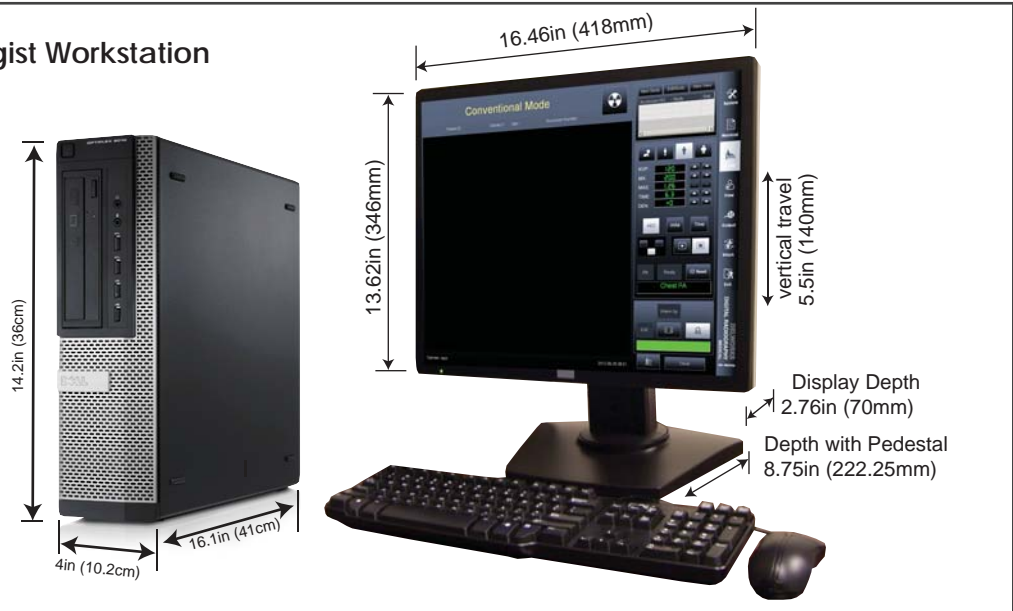
## DELWORKS E-Series Technologist Workstation

### PC

- Windows 7 Professional, 32 bit
- Intel Core i5, 3.0 GHz processor
- 4GB memory
- 500 GB hard drive
- 50,000 image capacity
- CD/DVD-R/W
- Includes keyboard and mouse

### Monitor

- 19in touchscreen display monitor
- 1280 x 1024 resolution



Please contact Del Medical for more information on digital upgrades and complete digital systems. Del's imaging specialists will be happy to assist you in determining the best solution to fit your needs.

## DEL MEDICAL

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 Del Medical is an ISO 13485 & ISO9001 Certified Facility.  
 Specifications are subject to change without notice.*

## UMG

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